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AUTHOR Ward, James; And Others
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ABSTRACT

The paper reports on a followup study of the work adjustment of 43 mildly retarded adolescents who had undergone training in social and work skills at the Granville Work Preparation Centre in Australia. Among the findings were that 40% of the Ss had a history of full open employment, with no unemployment at all, since leaving the Center; that 21% had been fully employed in sheltered workshops with no unemployment periods since leaving the Center; and that 7 Ss had only maintained employment for between 14-33% of their potential employment time since leaving the Center. It was also found that the majority of the Ss had been employed in one or two jobs, that none had gained jobs of high skill level rankings, and that only two had undergone additional formal training since leaving the Center. Additional findings include that appropriate work attitudes and habits seemed well established, that more problems on the job appeared to be related to speed rather than accuracy, and that there was an overall tendency for Ss to seek help from others rather than to solve problems themselves. (DLS)

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ADJUSTMENT TO WORK
A FOLLOW UP OF MILDLY INTELLECTUALLY HANDICAPPED ADOLESCENTS WHO HAVE UNDERGONE TRAINING IN A WORK PREPARATION CENTRE[1]

James Ward
Trevor R. Parmenter
Vivienne Riches
Margory Hauritz[2]

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2. All of Macquarie University.

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INTRODUCTION

It is arguable that a comprehensive range of services to meet the needs of the handicapped or otherwise marginal entrant to the workforce might include the following components:

1. detailed investigation of the client's needs, present achievement, aspirations, etc;
2. if necessary, programs of work preparation involving skill training and/or personal development;
3. search for appropriate employment and placement;
4. maintenance of clients, perhaps requiring retraining and periodic support.

In the case of the mildly retarded school leaver, a service which incorporates all these features is provided by the Granville Work Preparation Centre which is collaborating with a research team from Macquarie University over a number of research projects funded by the Department of Social Security. One of the most important of these involves periodic follow-ups of students from the Centre, the first of these being carried out in 1976 and being concerned with the group who had attended during the first two years of operation. The results of this initial survey (Ward et al, 1976) indicated that a significant number of trainees successfully obtained and were maintained in open employment and that a further group were effectively placed in sheltered employment. In the light of the deteriorating employment position, these data were promising and substantiated the favourable view of the mildly retarded employability produced by studies elsewhere. However, this investigation was regarded as laying the foundations for more intensive analysis and review, incorporating among other things, intensive personal interview. The results of the second follow-up are now presented. Its objectives were:

1. to determine the current vocational adjustment of ex-trainees with respect to their employment history and type of employment after several years on the labor market.
2. to investigate the social and personal adjustment of these individuals.

Procedure

To establish this information interviews were conducted either at the home of the individual or at the Work Preparation Centre after working hours. An interview schedule was designed and used to ensure uniformity and comparability of data. Also, as a source of further information and as a check on reliability, case files at the Work Preparation Centre were consulted.

Sample Characteristics

Fiftythree subjects left the Work Preparation Centre during the 1974-1975 period. Of these fiftythree, information concerning vocational and personal adjustment was available from fortysix, or 87%, of those adolescents for the 1976 survey. The other six ex-trainees had left their previous addresses, several moving to country areas with their families, the remainder were classified "address unknown". The passage of a further twelve months has meant the loss of another two subjects through change of address. In addition, four subjects (7.55%) included in the 1976 survey, three of whom are known to have been fully employed in the Sydney area since leaving the Work Preparation Centre, have refused interview. This means the sample actually interviewed now stands at forty although, for the purposes of examining employment patterns, calculations have been computed on the fortythree subjects for whom data is available. This constitutes 81% of the original sample of fiftythree.

Table 1 Sample

	f	%	cum %
1974, 1975 Leavers	53	100.00%	81.13%
1976 Sample	46	86.79%	
1977 Sample (40 interviewed + 3 refused, but data available.	43	81.13%	81.13%
1977 Refused interview and no information available	1	1.89%	83.02%
Moved intrastate	3	5.66%	88.68%
Address unknown	6	11.32%	100.00%

It is interesting to note that those who were currently unemployed or employed in sheltered workshops welcomed such contact and were relatively easy to interview. Those engaged in employment were more difficult, both to contact and to interview. Not only did some work overtime, but regular working hours when extended by long travelling times and some social engagements made access difficult.

Results

Results are presented in format similar to the initial 1976 survey - that is, variables and factors related to employment patterns are presented, together with patterns of employment revealed by the intensive follow up, 1977.

1. Factors Related to Employment Patterns

a) Social and Personal Factors

Of the fortythree subjects, twentyfour, or 55.8%, were male and nineteen, or 44.2%, female.

Ages ranged from seventeen years nine months to twentythree years eleven months at the time of survey, with the average age being nineteen years.

Disabilities

All subjects were classified at the time of entry to the Work Preparation Centre as having a mild intellectual handicap, that is, assessed IQ scores fell within the conventionally accepted ranges for mild retardation of 55 to 80 IQ points.

Further to this, 67.5% of the sample had disabilities additional to a mild intellectual handicap. This included 33% with several handicaps ranging from severe speech problems to epilepsy, muscular co-ordination problems, etc. Another 30% had a physical disability, such as hearing or eyesight, while 5% had emotional or psychological problems.

The high incidence of disabilities other than intellectual, and the severity of some of these handicaps, suggests that the population being referred to the Work Preparation Centre, Granville, consisted of high employment risk adolescents and hard-to-place school leavers, rather than adolescents who presented as low employment risks or short term cases. It seems, therefore, that special schools and referral agencies may have placed their easier cases through work experience programs and have referred the more difficult cases to the Work Preparation Centre for special training. This information is summarized in Table 2 below.

Table 2

Disabilities

N = 43	f	%	cum %
No other disabilities	14	32.56%	32.56%
Disabilities other than intellectual handicap	29	67.44%	100.00%
Types of disabilities			
a) multiple	14	32.56%	32.56%
b) physical	13	30.23%	62.79%
c) emotional/ psychological	2	4.65%	67.44%

While the objectives of the Centre were to train and place clients in open employment positions, this was simply not feasible for some cases, given the severity of these handicaps and the applied training techniques operating at the Centre in its initial years. This was particularly so for chronic speech problem cases and severe epileptics.

Sheltered Employment

Sheltered employment for such cases was consequently viewed as appropriate, although not necessarily permanent placement.

In all, ten rehabilitatees moved from the Centre to Sheltered Employment for this reason. Of these, one individual had spent four years in a sheltered workshop before referral to the Centre and presented so institutionalized a behaviour pattern, that neither the expertise nor the programs necessary to contend with such patterns was available in the Centre at that time.

Family and Background

As revealed in the 1976 survey, there was a disproportionate number of families for this sample whose father had died or was absent during the schooling years. The socio economic status of the family was also slightly lower than the regular high school group, when rated on Congalton's 7 point scale, and a significant number of mothers in the Granville sample were working full or part-time.

At the time of follow-up, ninetyone percent of the sample were still residing with parents. Another seven percent of the sample were living

in state boarding houses, leaving only two percent living independently in the community.

b) Educational Factors and Vocational Training

The majority of subjects had attended special schools or special classes for the mildly intellectually handicapped. Tested on individual intelligence scales, the sample of fortythree yielded an average verbal IQ score of 70.5 (SD 10.07), an average performance score of 73.09 (SD 12.77) and an average full scale score of 69.76 (SD 10.74). Tests used were one or other of the Weschler Scales.

Scholastic achievements for the sample were relatively poor. Reading ages range from unassessible/non readers, to a score of 14.3 years (Schonell R1 scale). The majority performed at around seven and eight years level of reading attainment on conventional tests as is shown in Table 3 below.

Table 3

Reading Age		
Non readers	2	4.65%
5- 6 years	7	16.28%
7- 8 years	17	39.53%
9-10 years	11	25.58%
11-12 years	2	4.65%
over 12 years	1	2.33%
	N = 40	

Vocational Training Programs 1974-1975

Granville Work Preparation Centre began operation in May, 1974, as a pilot Centre. Its aims were to assist mildly intellectually handicapped young people to prepare for and achieve job success and independence in the community. In the early stages the bias of training was heavily industrial, programs concentrating on workshop activity and full time production work in a factory setting. Initial entry to the Centre was accompanied by evaluation of basic abilities, and an introduction to the world of work. Emphasis at this stage was on learning good work habits, skills and attitudes prior to entering the workshop. According to individual needs, trainees could also participate in programs designed to develop independence and survival skills; personal and social competence; awareness of the world of work; and communication skills.

Progress to the production area occurred once trainees met certain work and social criteria. Industrial conditions operated within the workshop, where work tasks were subcontracted from industry. A primary emphasis during this stage of the training was upon the development of speed and accuracy commensurate with industrial standards to able bodied operatives. The training model employed during the years 1974, 1975 was, therefore, one of exposure. Trainees were exposed to a simulated industrial setting, and learned to perform to the speed and accuracy levels required for open employment. Trainees failing to meet such standards were reviewed and, where appropriate, reassessed with a view to sheltered employment placement.

Length of Training Time

Length of training time at the Centre ranged from one to twentytwo months, the average length being 10.3 months. Nor surprisingly perhaps, some of the longest training periods were for the more disabled individuals who were eventually referred to sheltered employment, due to their persistent inability to meet open employment standards. This is not to suggest, of course, that they were incapable of ever meeting such standards for, given the training techniques and technology now available, complex skills can be taught to mastery levels for both mildly and severely intellectually handicapped people. The flexibility of the program is illustrated by the variations in training times shown in Table 4, with programs ranging from one month to two years in length. Comment upon these data will be made later.

Table 4

Length of Training Time - Granville WPC

Months Training Time		%
1 - 3	5	11.63
4 - 6	9	20.93
7 - 9	7	16.28
10 - 12	10	23.25
13 - 15	4	9.3
16 - 18	2	4.63
19 - 21	5	11.63
22 - 24	1	2.33
N = 43		

Mean	10.3249 months
median	10.0
S.D.	5.915
Range	one to 22 months

c) Vocational Factors Affecting Employment

Economic stringency over the last five years has resulted in a gradual decrease in the total number of jobs available. At the same time the numbers of persons seeking work has tended to increase as a result of the entry of women of all ages to the workforce. The effects of this upon opportunities for the retarded has been variable especially since many believe that technological change may lead to increases rather than reductions in the number of low skill level jobs available on the labor market (Nixon, 1970, Presidents Committee on Mental Retardation, 1969).

Not unexpectedly, therefore, the available employment data both from overseas and Australian sources is somewhat gloomy. For example, an international labour review (1977) cited overall unemployment in 24 OECD countries in December, 1975, as totalling 17 million, or 5.4% of the total labour force. Seven million (41%) of these were people under the age of 25 years, disproportionate in the light of estimates of population distribution in which the under 25 age group constitutes only 22% of the total active population.

Australian Adults

Comparable unemployment rates and the age effect noted above are also evident in the unemployment rates for Australia produced at November, 1977, and summarized in Table 5 below.

Table 5

National Registered Unemployment Rates by Age November, 1977.

	Male	Female	All Persons
15-19 yrs	14.9%	16.8%	15.8%
20-24 yrs	7.9%	7.2%	7.5%
25-34 yrs	3.5%	2.7%	5.2%
33-44 yrs	2.4%	3.7%	2.9%
45-54 yrs	2.4%	3.2%	2.6%
55 +	2.1%	N/A	2.1%
TOTAL	4.3%	6.5%	5.1%

Employment of Young People

The increase in young workers unemployment accounts for 36% of the total increase in unemployment between 1973 and 1975, and by 1976 one third of all the unemployed in European Countries were under 25 years of age. Not only are young people failing to gain placement in employment, but figures also suggest they are remaining out of work for longer periods of time than pre-1974. The most liable to unemployment are the youngest, the first time job seekers and those with the lowest educational qualifications. (Melvyn, 1977).

Australian Young People

Attention is drawn to table 5 which shows that young Australians between the ages of 15 to 19 have an unemployment rate of 15.8% compared to the general work force rate of 5.1% for the quarter ending November, 1977.

Regions of highest unemployment in the Sydney metropolitan area are in the north west and south west (Table 10b). Within these regions, areas (based on CES areas) with highest recorded unemployment registration are the areas of Blacktown, Liverpool, Mt.Druitt and Fairfield.

Junior unemployment has been concentrated in the unskilled occupations in the case of males, with the unemployment/vacancy ratio being as high as 135:1 in May, 1977, and 22,420 junior males seeking employment in these occupations[1]. In the case of junior females, unemployment has centred upon clerical and administrative occupations, with the unemployment/vacancy ratio being 35:1 in May, 1977, and 40,346 seeking work.

Another equally pessimistic observation was made by Melvyn (1977) who claimed that in Australia at the end of 1976 40% of the total registered unemployed were under twentyone years.

More young people are remaining at school longer, many possibly influenced by the adverse labour market conditions. A fear expressed in a report of the Australian Economic Review refers to the extent to which older leavers from educational institutions will displace juniors who are more marginal (in terms of skills and motivation) from employment. This fear must include the handicapped worker for whom displacement is also a possibility.

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[1] Employment and the Labor Market, Chapter 5, The Australian Economic Review, 4th Quarter, 1977, pp.48-54.

Reasons for such high levels of youth unemployment are, therefore, complex. They include actual decline in job numbers available, cyclical factors in economics and structural imbalances, while legislation and practice favour job security of established workers, and employers may prefer adult workers for whom the cost/benefit ratio is more favourable. (Melvyn, 1977).

All these factors can influence the employment of the mildly retarded worker who has entered the workforce.

RESULTS

PATTERNS OF EMPLOYMENT

Potential employment time is the total time elapsed since leaving school or a training program such as the Work Preparation Centre program until the nominal date of the survey. This constitutes the time within which a person is available for or potentially employable, be it for competitive or sheltered employment. Sheltered employment constitutes employment in a sheltered workshop setting.

As in our earlier survey, full employment is defined as open employment in one or more full time jobs from the time of leaving school or the Work Preparation Centre until the nominal date of the survey, with no unemployment history. Intermittent employment is periodic open employment - that is, periods of both open employment and unemployment within the potential employment time. All employment times are expressed in months.

The total number of months each individual has been available for employment since leaving the Work Preparation Centre training program were added together to yield a total potential employment time (P Σ.T.) for the sample of fortythree. At the end of June, 1977, this stood at 925 months.

The total number of months spent in open employment during this P.E.T. stands at 554 months. The total number of months spent in unemployment was 162 months. Comparing the percentage of time spent in open employment to percentage of potential employment for the sample as a whole, it may be seen that 59.9% of the time has been spent gainfully employed and, as sheltered employment accountered for another 22.6% of the time, only 18.9% of the potential employment time was spent in unemployment.

A more detailed analysis of these data is presented in Table 6 below.

Table 6

Employment

End Feb., 1978	f	%	cum %
full open employment 100% O.E.	17	39.5	39.5
90% to 99% O.E.	4	9.3	48.8
Intermittent employment, 60-89%	4	9.3	58.1
0-59%	6	14.0	72.1
Sheltered Employment	9	21.0	93.1
Domestic Duties following some employment	2	4.6	97.7
No employment - On Pension	1	2.33	100.00

N = 43

Employment Duration

It will be observed that, in all, seventeen subjects (39.5%) have had a history of full open employment with no unemployment at all since leaving the Work Preparation Centre and with employment lengths ranging from 14 months to 36 months. Intermittent employment accounts for sixteen individuals (37.2%). Five of these have experienced only one or two months unemployment and another only 3 months, while their gainful employment times range from 13 to 34 months. (For details see Appendix 2).

Nine subjects (20.9%) have been fully employed in sheltered workshops and have also had no unemployment periods.

In contrast, seven individuals have only maintained employment for between 14% to 33% of their potential employment time. Two of these individuals have had mixed sheltered and open employment and another spent a portion of his potential employment time as guest of the N.S.W. Prison system. All of these seven cases had been judged by the Work Preparation Centre as potential employment risks. A number had had their training cancelled and were considered unemployable. One had been referred to sheltered employment and the remainder were considered to be probable intermittent employment cases, not because of disabilities but as a result of behavioural and attitudinal factors. In the case of one individual, training was cancelled and a disability pension applied for and granted. Here there has been no subsequent employment.
(For details see Figure 2).

Current Status

Reference to Table 12 (Appendix) reveals that at the end of June, 1977, twentythree cases were employed on the open market and nine in sheltered employment. This constituted 74.4% employed in June, 1977. In February, 1978, twentyfour cases were employed in open and nine in sheltered employment. This was 76.7% of the sample. Another two cases (4.7%) constituted married women engaged in full time domestic duties bringing the total at that point in time to 81.4% gainfully occupied. (See Figure 1).

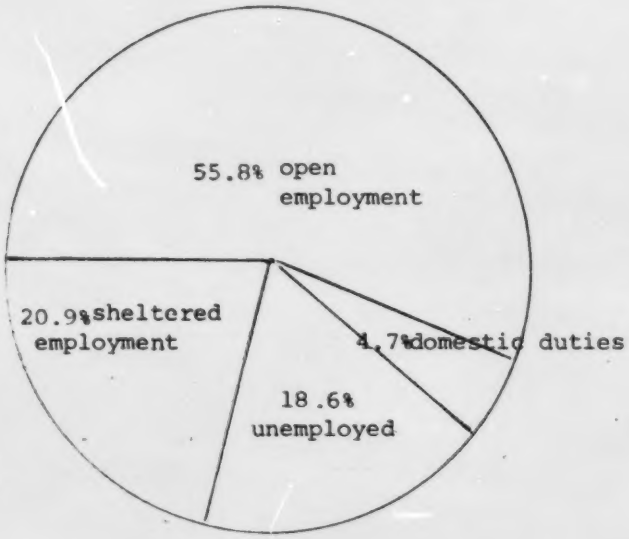

Figure 1: Employment Status as at February, 1978.

A 100% full open employment

B Intermittent employment 60-99% O.E.

C 20-39% O.E.

D 0-19% O.E.

E 100% sheltered employment

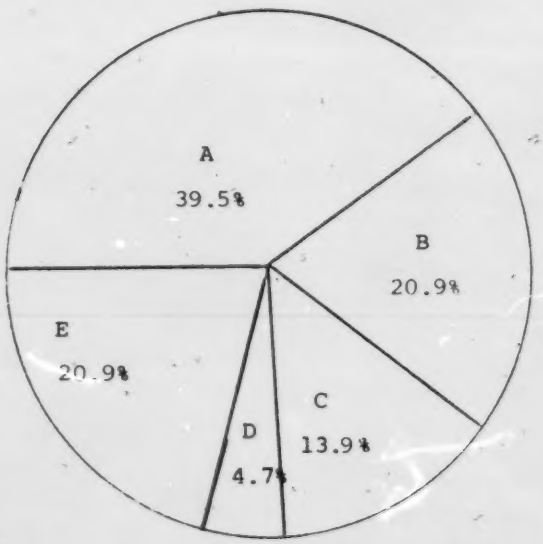

Figure 2: Percentage Time Spent in Employment Since Leaving G.W.P.C. 1974-1975.

Number of Jobs

The majority of subjects have been employed in one or two jobs, with the highest number of jobs being three. Apparently there has been little job change since the 1976 survey. The number of unemployment periods was also relatively stable. Again, no more than three unemployment periods were recorded (see Table 8).

Table 7

Number of Jobs

	1976 N=46	1977 N=43
No Jobs	2.1%	2.3%
One job only	54.4%	39.6%
Two Jobs	15.2%	30.3%
Three Jobs	2.2%	6.9%
Sheltered Employment	26.1%	20.9%

Table 8

Unemployment Periods

	1976 N=46	1977 N=43
No unemployment periods at all	60.9%	60.5%
One unemployment period	28.2%	23.3%
Two unemployment periods	10.9%	13.9%
Three " "	-	2.3%

Job Status

Ranked on Congalton's 7 point scale for job status, no ex-trainees had gained jobs in the top three high skill level rankings. Two individuals had gained jobs in the fourth ranking, and four in the fifth ranking position, denoting medium status and skill. As expected, the majority of the jobs fell in the lower status, lower skilled positions. For details see Table 9.

Table 9

Job Status (Congalton 7 point ranking scale) as ranked on latest job held.

	f	%	cum %
Rank 1 high skill/high status	-	-	-
Rank 2	-	-	-
Rank 3	-	-	-
Rank 4	2	4.7%	4.7%
Rank 5	4	9.3%	14.0%
Rank 6	23	53.5%	67.5%
Rank 7 low skill/low status	3	6.9%	74.4%
Sheltered Employment	10	23.3%	97.7%

N.B. *one case (1.3%) on pension - never employed

Further Training

Since leaving the Work Preparation Centre only two people have undergone additional formal training. The majority, however, stated that they received a demonstration of their job duties when they commenced employment. Another 17.5% claimed to have had on-the-job and specific training for the job beyond such initial demonstration, this being provided by the employer.

Results Relating to Training and Job Performance

Appropriate work attitudes and work habits seem well established, and ex-trainees appeared confident and aware of appropriate behaviour concerning bundying on and off; attending work punctually and regularly; ringing in when sick or unable to attend work; correcting errors and mistakes; reporting to foremen or supervisors for new work, in case of problems or for machine breakdowns. Moreover, competence and knowledge was noted in areas such as the giving and receiving of notice (to leave) and seeking and keeping jobs.

The majority of ex-trainees (41.5%) nominated skills relating to work performance, speed and quality control as the most important things learned during training at the Centre. Fifteen percent nominated factors and skills relating to job seeking and job placement as most important, 12.5% felt skills in communication and social relations were the most important and another 12.5% felt a combination of these areas for them were the most important things learnt.

The group of 7 (17.5%) who were unable to remember what they had learnt were ex-trainees who had been placed in sheltered employment and presented as fairly passive, unaware individuals.

Although 47.5% of the sample said they would, in fact, prefer a different job or type of job from the one presently held, the group on the whole presented very realistic attitudes. They expressed awareness of the unemployment situation facing themselves and their peers and, though having often acknowledged a wish to have a different type of job, admitted that they were planning to stay in their present jobs as long as possible and, in 27.5% of cases, for life if possible. Seventy percent of the sample, contrary to popular opinion, said they would prefer to try various job stations within their present job rather than do the same repetitive tasks all the time and fifty percent admitted that they got bored fairly readily and do welcome change.

Speed and Accuracy

More problems on the job appeared to be related to speed than accuracy, for 31.5% of the sample admitted they experienced difficulties with speed, 10% admitted major difficulties in pacing themselves to meet deadlines and production demands, while 17.5% felt their problems were with quality control and reject rates. As expected, a difference between open and sheltered employees was obvious in the response to these questions, for most sheltered workshop employees denied the existence of production demands, deadlines or speed factors and relied almost completely on supervisors to monitor their work and help out whenever a problem arose.

Asked what each considered to be the biggest problem in keeping a job, the majority (62.5%) replied with factors relating to speed and accuracy. Another 15% felt speed and accuracy in combination with social relationships was most important. Other problems involved relationships with supervisors and workmates.

Job Importance

The importance of having a job was keenly felt by most of the sample. The main reasons for job importance were seen as earning money; getting out from home; meeting friends; job satisfaction and status. For example, one girl described a life of discrimination and school failure which has now been reversed since her continued successful holding of a job superior in status and pay to her peers. Another young man who saw

himself as a failure throughout his schooldays has gained for himself a job where his previous history is unknown and where his successful on-the-job performance has led to further training and a promotion position. Thus 17 young retarded people now perceive themselves as holding jobs which have a degree of skill level which gives them confidence and competence to enable them to find other jobs if necessary.

Problem Solving and Criticism

While sheltered employment cases denied production demands and sought help and assistance regularly from supervisors, they also admitted reluctance to attempt to solve work or personal problems themselves if and when these arose. Furthermore, they stated that supervisors did not criticise them or their work.

In contrast, those involved in open employment were more disposed to solve problems themselves and they reacted to criticism by trying harder or trying to argue or explain their position. Other reported responses included ignoring the criticism, continuing work slowly, stopping work or walking out. An inability to accept criticism was often expressed in the form of denial or hostility and appeared to be a relevant factor in job success and adjustment.

Overall, however, there was a tendency for ex-trainees to seek help from others rather than solve problems themselves. With regard to work problems, the largest number (52.5%) stated they would seek help from the boss first, and only 17.5% said they would try to solve a problem themselves. Similarly with personal problems, 70% admitted they would first seek parents' help, although 40% said they would also try to solve the problem themselves. It would appear, therefore, that independence training, appropriate reaction to criticism and problem solving skills could be useful adjuncts to future programs for vocational and personal-social independence.

The issue regarding normalization has already been raised. As noted, four subjects who are fully employed refused interview completely. Of those who were interviewed, 19 or 47.5% stated that they have not kept in contact with the Centre since they left, as there as no need to do so. Fifteen individuals (37.5%) stated that they never wanted vocational counsellors or follow up officers to visit them at their workplace and 12 (30%) refused to give permission to members of the Macquarie Research Team to approach employers and ask about on-the-job performance. From

a population which is, in the main, excessively acquiescent and timid, such positive assertive behaviour is to be applauded. The shift from dependency to independence and integration into the workplace and the community does, for these people, seem successful. The desire to retain privacy and to escape relabelling and/or classification can be seen here as a final step in the rehabilitation process.

For those individuals who have not gained complete independence, a significant number (25%) welcome and seek contact with Centre staff for primarily social reasons, while five still attend the social club which meets after working hours at the Centre.

Dismissal

In the event of losing a job, only 35% of the sample stated that they would register for unemployment benefits. Fiftyfive percent said they would immediately look for another job themselves. Asked about seeking help for placement, 40% would contact a CES office seeking work, but 45% definitely would not. Nor would many contact the Granville Work Preparation Centre, although 37.5% would consider doing this if difficulty was experienced. Only 10% would seek help from parents, and 7.5% from friends. Ten percent said they would stay home. Again, the differences between those engaged in open and sheltered employment are evident in the type of response plan envisaged for when laid off or fired. Those in sheltered employment were more prone to stay home or to seek help from agencies and existing facilities. Those employed on the open market were more independent and self reliant.

Independent Living and Social Adjustment

At the time of survey, 92.5% of the sample were still single. One person was engaged to be married, another was married, and one person had been married and was separated. Moroever, thirtynine of the fortythree subjects (91%) were still residing at home with parents and family; three were living in boarding houses and only one person was renting with others.

Despite job independence, it does appear therefore that for this first sample of graduates from the Work Preparation Centre, independent living in the community and social independence has not yet become a reality.

Heavy reliance on family was noted for help in personal matters, in social affairs and in entertainment as well as residence. Very few

persons belonged to social clubs, sports clubs or formal groups of any type and, of the seven who did have club affiliations, the majority of these were the Social Club at the Granville Centre itself.

Leisure

Weekend and spare time activities centred upon watching television and much time was spent with family, either at home or visiting. Apparently a number of individuals spend time alone, either at home alone or going out alone. Several mentioned riding motor bikes, others driving cars, others walking alone. It was significant that little use is made of the telephone, although the majority had access to telephones in their own homes.

Friendships

Friends were few, and had in the majority of cases been retained from school days or were neighbourhood friends. Some friendships had been formed while at the Work Preparation Centre and some at work, but the quality of these friendships can be severely questioned. Many would deserve classification of acquaintance rather than friend, as there was little contact or communication. While fitteen of the group had friendships with members of the opposite sex, a total of twentyfour never had. Indeed, twelve individuals stated that they did not wish to go steady or to marry and were, in fact, quite isolated. Considering the mean age of the sample to be 19 years, with the ages ranging from 17½ years up to 23 years 11 months, this seems to be a rather large proportion not in contact with opposite sex peers.

Benefactors

Unlike the United States, there did not appear to be a heavy reliance on benefactors - a particular person to whom the mildly retarded could go in time of trouble. This role tended to still be reserved for family.

Hobbies

Significant interests in hobbies were apparent, the range of which varied quite considerably. Gardening, sports, craft, homecraft and art were popular and model building was for some an all consuming interest. One man apparently spends all of his leisure time hours rebuilding a camper-van which he intends to drive to Northern Queensland for his holidays.

Citizenship

Although all except one of those interviewed were eligible to vote, only 19 persons had, in fact, enrolled to vote, while only 8 had actually voted. Individuals were unaware of voting procedures, enrolment procedures and basic citizenship rights and duties.

Legal Problems

The mildly intellectually handicapped population has a history of minor legal infractions and offences. To date, 72.5% of this sample have remained free from any legal problems. The remainder, however, have experienced persistent problems, for among 11 individuals there have been a total of 6 court proceedings, 10 fines and one prison term. The offences were in the main minor - being due to traffic offences and ticket evasions. There have also been two cases of uncontrolled behaviour, one drunk and disorderly charge and one armed robbery offence. All of these problems occurred within the group experiencing minimal intermittent employment.

As Gunzburg (1973) noted, the silly delinquencies committed by this population are inadequately covered up. Inability to relate to authority figures, or to cope with a problem situation, passivity, acquiescent behaviour and inability to stand up for ones rights, render this population more vulnerable to abuse and less able to extricate themselves from generally harmless situations, such as lost train tickets, etc.

Financial Affairs

Banking and budgeting appear to have been successful Work Preparation Centre programs, as 87.5% have their own bank accounts and 20% have building society accounts. They are, in fact, saving money for specific purposes (a home unit, car, TV sets) or for the future generally. Most are covered for medical insurance by basic medibank or, in eleven cases, medical insurance other than basic medibank. Several also have life insurance policies or superannuation. The majority are debt free and, while there are some outstanding debts, these are for normal purchases among this age group, such as cars and television sets. Only in one case was the amount of debt enough to cause worry.

Self Help Skills, on the whole, appear to be adequate as demonstrated by ability to use public transport, to tend to banking and budgeting, to pay board and save money for specific and general purposes. In addition, seven individuals have gained driving permits while eight have a driving licence and, in some cases, their own cars.

DISCUSSION

It will be recalled that, in our view, the work of the Granville Work Preparation Centre exemplifies the processes of investigation of client needs, implementation of work preparation programs, together with placement and maintenance of clients in the work force. At a time of economic stringency, implementation of the second two can obviously lead to considerable difficulties. Thus trainees leaving the Granville Work Preparation Centre during 1974, 1975 were, in fact, faced with decreasing employment opportunities in the very job areas for which they had been prepared and were much in need of the help given by vocational counsellors in placement and maintenance. This support, as noted in our earlier survey, may have contributed materially to the comparatively high number of Work Preparation Centre trainees gaining initial work placement.

SUCCESS CRITERIA

Adverse employment conditions are an example of the many factors which can affect the choice of criteria of success in this area. It may also be assumed that legislation on employment, changing educational practices and other social economic circumstances will have marked effects on the rehabilitation client's placement and maintenance in employment. Inevitably, therefore, criteria quoted in other studies have varied over time and place with no one index or criterion being consistently accepted or employed. Moreover, although a lower success rate has been judged acceptable for a MIH institutionalized population as opposed to a non-institutionalized population, the level at which success is judged 'acceptable' has often appeared to be arbitrary. 'Acceptable' rates have varied from any vocational adjustment at all to levels as high as 80% or more. (Fernald, 1919; Peterson and Smith, 1960; Dinger, 1961; Bluhm, 1977; Chaffin et al, 1971; Muth et al, 1975; Conley, 1974). For example, although Edgerton et al (1976) found less than 50% of his cohort were employed only several years after placement, he nevertheless considered such results acceptable. In contrast, Mahoney (1976) believed that, regardless of criteria, a success rate of over 60% was both achievable and realistic for special class graduates, although optimistic for more handicapped and/or institutionalized individuals.

Australian studies, however, have not proved so optimistic, for these

generally report much lower success rates among special school graduates than the 60% reported by Mahoney. One Victorian follow-up study examined employment of 144 ex-pupils between 1957 and 1971 and found only 29% had ever held open employment positions and, by the time of survey, the proportion in employment had fallen to 19%. A second Victorian study revealed that only 32% of 100 ex pupils gained placement and, by the time of survey, less than half of these were still employed (Limbrick, 1977). A Sydney special school discovered that in 1969, 18 ex pupils had held over 50 positions and only 6 had retained their original positions. The average length of stay in the job was 3 to 4 months. The introduction of a work experience program, however, increased the success rate in 1974 so that 59% had retained original positions, another 15% had changed jobs but improved their positions and 26% were unemployed at the time of survey (Wirth, 1974; Roberts). Low success rates were also revealed by Krupinski et al, 1973.

The results of the Granville Work Preparation Centre sample compare very favourably with these studies. Using a criterion of employment duration, then seventeen or 40% of the sample have maintained full 100% open employment over periods of 14 to 36 months. Another six individuals have maintained open employment for over 80% of their potential employment time while a total of 26 individuals have achieved over 60% open employment during their time on the labour market, regardless of high youth unemployment in the very areas and jobs which most affect them. This constitutes sixtyone percent of the sample who have experienced successful competitive employment.

Another nine individuals, or 21% of the sample, have experienced full (100%) sheltered employment. Considering the extent and degree of handicaps, other than mild retardation, found among this group and, given the exposure model training program which was operating at the Work Preparation Centre at that time, sheltered employment was, and is, considered effective and successful placement for this group. Of the eight individuals who have experienced limited intermittent employment or, in one case, no employment, the majority had never completed training at the Work Preparation Centre. (Appendix Table 12). Several individuals had left the Work Preparation Centre before the completion of training to seek employment, despite the Centre staff's opinion that they were not ready for competitive employment. The remainder had had training cancelled by the Work Preparation Centre. Reasons for cancellation of cases ranged from non-attendance, family factors, poor

motivation and/or attitudes, to severe behavioural disturbances. These individuals cannot be considered "graduates" of the Work Preparation Centre program, although they did in fact gain entry to the program. (It is interesting to note that all the legal infractions incurred by the sample did, in fact, occur within this group and it is reasonable to suppose that intervention other than, or in addition to, vocational preparation, would be necessary for these somewhat vulnerable individuals).

Thus examination of current employment rates and comparison with data obtained in our 1976 survey indicates that the passage of a further twelve months has meant continued vocational stability and adjustment for the Work Preparation Centre graduates. These results confirm Halpern's (1973) proposition that deteriorating community economic conditions will not necessarily put mentally retarded workers in jeopardy of losing their jobs, despite popular opinion. Research at the University of Wisconsin concerning the relationship between unemployment rates and success rates for vocational rehabilitation in the U.S. over a twentysix year period also supports Halpern's proposition. Although evidence suggested that rehabilitation rates dropped as unemployment rates increased, the unemployment rate had to exceed 5.5% or 6% (recession conditions) before any meaningful reduction in vocational rehabilitation program success occurred (Dunn, 1974). In one sense our results are, if anything, more favourable for there is some evidence of an upward trend towards medium status and skill levels, suggesting that job mobility has occurred upwards and without incurring periods of unemployment. However, it appears that high unemployment levels do adversely affect entry of mentally retarded persons into the labour market, although well structured vocational training programs will continue to effect placement despite the general level of unemployment. (Halpern, 1973; Dunn, 1974; Bank-Mikkelsen, 1975; Baroff, 1974; Butler, 1970; Bellamy and Snyder, 1976; Cobb, 1972; Brolin & Kokaska, 1974).

Social and Personal Adjustment

Employment is not the only objective of rehabilitation, however. Preparation for independent living in the community is a dual and none the less important aim. Here it is claimed that the results of interviews with the MIH adolescents who underwent training at the Work Preparation Centre in 1974-1975 affirmed that very real advances and success had been achieved in self help skills such as travelling, use of public transport, banking and budgeting. However, important areas

of deficit were noted, e.g. citizenship and inability to use community resources effectively. A fairly dramatic difference was noted between those individuals who have experienced successful open employment and the sheltered employment and more marginal open employment cases on such variables as problem solving, independence and acquiescence/ assertion. The first group were demonstrably more confident and assertive and more inclined to solve their own problems, while the latter group presented as more dependent, unwilling to try to solve their own problems and passive in the presence of authority or more assertive persons.

Consequently, normalization has certainly occurred for a number of the Work Preparation Centre graduates, both in vocational and social adjustment. Questioned about their training program, these individuals expressed positive attitudes, but firmly stated that they no longer had a need to contact the Centre or be associated with it, nor did they wish to incur the possibility of relabelling.

IMPLICATIONS FOR PROGRAMMING

Since preliminary results of this follow-up began highlighting the social inadequacies of this group, the Work Preparation Centre has extended programs aimed at developing those social and independent living skills necessary to function fully in the community. The area of interpersonal relations is particularly relevant, as individuals in both open and sheltered employment situations have often presented as very lonely people who are unaware of procedures to break this pattern. Similar findings have been reported by Gunzburg, 1973; Clarke and Clarke, 1973; Zisfein and Rosen, 1974; Rosen, Clarke and Kivitz, 1977; Speake and Whelan, Presidents Committee, 1969; Goldstein, 1972; Lee et al, 1972; Durham, 1978).

Assertive training, particularly, has been increasingly identified as an area of real behaviour deficit and program need for many of the MIH population in work and social situations. Programs have, therefore, been developed to teach specific skills in assertion, communication and interpersonal skills. Voting, citizenship and the use of community facilities have formed the basis of other Centre programs, in addition to social skill and leisure time programs (currently in press).

CONCLUSION

Our follow-up of "graduates" from the Granville Work Preparation Centre continues, therfore, to reinforce the belief that a substantial proportion of the mildly retarded of working age can be placed and maintained in open employment and, in addition to this, can develop satisfying, though often somewhat restrictive adult life styles. The results obtained from this longitudinal study have already been instrumental in developing new programs in the Work Preparation Centre, particularly in such areas as personal development and general knowledge. It is hoped that these will, in normal employment conditions, help those mildly retarded young people who, though capable of demonstrating or acquiring adequate skills, are marginally employable through deficient socialization or inadequate personal adjustment.

The data obtained thus far provide positive evidence for the concept of a Work Preparation Centre and can undoubtedly contribute to a future analysis of its cost effectiveness. Here it is proposed to consider possible relationships between the various components of the rehabilitative approach epitomized by Granville Work Preparation Centre and the criteria of subsequent employability and adjustment. Such work is in preparation and will be reported in due course. It is worth noting, however, that the problems surrounding cost benefit analysis in the areas of rehabilitation are well known, e.g. U.N. D.E.S.A. (1977) and that these would be greatly compounded in the present instance by a high level of youth unemployment. The latter factor effectively prevents the analysis of a true range of options for the mildly retarded when, without some sort of positively discriminative policy, open employment may be virtually impossible. A more useful and perhaps more significant approach may be to examine criteria in the areas of personal development and socialization and here the concept of intensive work preparation receives support from recent and somewhat unexpected sources. For, although the necessity for early identification and intervention is well documented, there is a growing body of evidence that cognitive processes can be substantially modified in adolescence, e.g. Clarke and Clarke, 1976; Feuerstein, 1977; and that this late development period can also be a focus for preventive intervention. This could operate in the case of those mildly retarded young people in whom adverse socio-cultural influences are evident and who would be consequently a prime target for work of this type. The intensive programs currently used in the Work Preparation Centre setting can, therefore, be viewed alternatively as an excellent application of this principle, the implications of which far transcend the teaching of simple self help and industrial skills.

Table 10a: Registered Unemployment - Sydney Metropolitan Regions

June, 1977, and Feb., 1978.

		Unemployed-Awaiting Placement			Applicant to Vacancy Ratio	Youth U/E as % Total U/E
		Adult	Junior	Total		
City	June 77	5,628	859	6,486	8/1	13%
	Feb 78	6,151	877	7,028	8/1	12%
(Sydney	June 77	18,400	6,345	24,745	26/1	26%
(Southern	Feb 78	19,512	8,095	27,607	20/1	29%
(Sydney	June 77	14.127	9,581	23.708	31/1	40%
(NW	Feb 78	14,464	12,238	26,702	21/1	46%
(Sydney	June 77	8,708	5,461	14,169	27/1	39%
(SW	Feb 78	8,885	6,945	15,830	30/1	44%
Sydney N	June 77	1,674	802	2,476	5/1	32%
	Feb 78	2,061	1,279	3,340	5/1	38%
(Sydney	June 77	2,145	1,234	3,379	16/1	37%
(NE	Feb 78	2,416	1,694	4,110	18/1	41%

Table 10b:

Unemployment by Area

Within these regions the areas having the highest youth unemployment and highest applicant to vacancy ratios are also in south and north western regions.

		June, 1977	A/V Ratio	Feb.,1978 Awaiting Placement	A/V Ratio
1.	Liverpool	2357 young people	29/1	3058	53/1
2.	Mt. Druitt	1727 " "	78/1	2131	48/1
3.	Blacktown	1564 " "	83/1	1748	42/1
4.	Fairfield	1544 " "	33/1	2128	26/1
5.	Parramatta	1535 " "	22/1	2280	17/1
6.	Caringbah	1247 " "	33/1	1575	16/1
7.	Hurstville	1247 " "	30/1	1425	17/1
8.	Bankstown	1239 " "	16/1	1699	16/1
9.	Granville	1212 " "	35/1	1349	18/1
10.	Campsie	1147 " "	7/1	1162	51/1
11.	Windsor	1064 " "	16/1	494	15/5
12.	Marrickville	1058 " "	30/1	1079	31/1

(Source: Commonwealth Department of Employment and Industrial Relations)

Table 11

Handicapped Youth (under 21) Untrained and Registered Awaiting Employment, June, 1977.

Area	M	F	Total
Bankstown	36	20	56
Blacktown	68	48	116
Burwood	11	1	12
Fairfield	30	16	46
Granville	37	21	58
Liverpool	44	29	73
Mt. Druitt	31	24	55
Parramatta	34	24	58

APPENDIX 2

Table 12: Individual Employment Patterns

Subject	Mths PET	Mths O.E	Mths S/W	Mths U/E	% E	Working June,77	Working Feb.,78	WPC * Rating	Outcome * Feb.,1978	Comments
01	14	14	0	0	100	✓	✓	1	1	
04	21	21	0	0	100	✓	✓	1	1	
05	22	22	0	0	100	✓	✓	1	1	
06	16	16	0	0	100	✓	✓	2	1	
11	14	14	0	0	100	✓	✓	1	1	
13	26	26	0	0	100	✓	✓	1	1	
23	29	29	0	0	100	✓	✓	1	1	
28	24	24	0	0	100	✓	✓	1	1	
34	22	22	0	0	100	✓	✓	1	1	
40	15	15	0	0	100	✓	✓	1	1	
42	15	15	0	0	100	✓	✓	1	1	
42	25	25	0	0	100	✓	✓	1	1	
49	15	15	0	0	100	✓	✓	1	1	
50	17	17	0	0	100	✓	✓	1	1	
52	36	36	0	0	100	✓	✓	1	1	
56	30	30	0	0	100	✓	✓	1	1	Refused Interview
27	30	30	0	0	100	✓	✓	1	1	Refused Interview
07	35	34	0	1	97	✓	✓	1	1	
14	18	17	0	1	94	✓	✓	1	1	
46	18	13	4	1	94	✓	✓	4	1	Placed in sheltered employment and progressed to O.E.
02	21	19	0	2	90	✓	✓	1	1	
48	15	13	0	2	87	✓	D/D	1	6	
25	19	16	0	3	84	-	✓	1	1	
22	18	12	0	6	67	-	-	2	2	
35	19	12	0	7	63	✓	✓	1	2	
10	31	19	0	12	62	-	-	3	2	
03	15	5	0	10	33	-	✓	3	3	
32	30	2	8	20	33	-	-	4	3	
38	18	2	4	12	33	-	D/D	5	6	
37	16	5	0	11	31	-	-	3	3	
43	17	4	0	13	24	-	-	5	3	Prison term for some of this time
31	39	9	0	23	23	-	-	5	3	In car accident after placement. Hospitalization taken into account.
21	21	3	0	18	14	-	-	3	3	
44	20	0	0	20	0	-	-	5	5	On pension

Table 12 continued

	Mths PET	Mths O.E.	Mths S/W	Mths U/E	% E	Working June,77	Working Feb.,78	WPC * Rating	Outcome * Feb.,1978	Comments
08	18	0	18	0	100	✓	✓	4	4	
12	16	0	16	0	100	✓	✓	4	4	
16	25	0	25	0	100	✓	✓	4	4	
17	32	0	32	0	100	✓	✓	4	4	
19	19	0	19	0	100	✓	✓	4	4	
20	20	0	20	0	100	✓	✓	4	4	
29	34	0	34	0	100	✓	✓	4	4	
33	14	0	14	0	100	✓	✓	4	4	
53	14	0	14	0	100	✓	✓	4	4	

*RATING CODE as rated by Work Preparation Centre, Granville, at termination of training

1. fully employable
2. probable intermittent employment
3. marginal open employment
4. sheltered employment
5. Cancelled - unemployable
6. No longer seeking employment
   < other Domestic Duties

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Professor James Ward, BA Sheff., Dip Psych Lond., Dip Child Psych Birm., PhD Manc., FBPsS.
Professor of Education and Director of The Special Education Centre, Macquarie University.

Professor Ward has had a wide experience in teaching and research in the areas of psychology and special education. Prior to his taking up the foundation chair in Special Education at Macquarie University, he held a number of teaching positions in the U.K. and North America.

Trevor R. Parmenter, BA NE, MACE
Lecturer in Special Education, Macquarie University.

Currently field director of the Granville WPC Research Project. Previous experience includes teaching physically and intellectually handicapped children. Research interests are reading, the vocational preparation of the handicapped and service delivery.

Vivienne Riches, BA Dip Ed NSW
Senior Research Assistant

Ms Riches has had experience in teaching physically handicapped children and she is currently completing post graduate studies in association with the WPC project.

Margory Hauritz, BA
Research Assistant

Ms Hauritz, who has worked with the follow-through programs at the Macquarie University Special Education Centre, is currently completing a BA(Honours)program in the area of skills training.